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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,086	07/15/2003	Yasuo Hirata	P/16-337	9265

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EXAMINER

SMITH, PHILIP ROBERT

ART UNIT PAPER NUMBER

3739

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,086

Applicant(s)

HIRATA, YASUO

Examiner

Philip R. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 17-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- [01] A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/6/2006 has been entered.

Specification

- [02] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 U.S.C. 112, Paragraph Two

- [03] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [04] Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [05] Claim 1 recites that "the insertion unit guide member is passed through or placed in a pipe." This appears to be a declaration of intended use; it is unclear as to whether a "pipe" is being positively recited. The following is suggested: the insertion unit guide member is --adapted to be-- passed through or placed in a

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pipe.

[06] Claims 6-7 recite "a tubular member," which lacks antecedent basis.

[07] Claim 8 recites that "the lengths of the tubular members are determined so that the length of the tubular member located on the distal end side will be larger than that of the tubular member located on the hand-held portion side." There is antecedent basis for "a plurality of tubular members." However, "the tubular member located on the distal end" and "the tubular member located on the hand-held portion side" have no antecedent basis. Furthermore, it is not clear which tubular member is being described, even in view of the drawings. Also, "larger" is recited where "longer" is expected.

[08] Claim 10 recites "the tubular member." Again, there is no antecedent basis for "the tubular member," since only "a plurality of tubular members" has been recited. "A first tubular member" is suggested, or alternatively, "one of said plurality of tubular members."

[09] Claim 11 recites that "wherein when the pipe has a flat shape, the tubular member to be passed through the pipe comprises..." Again, it is unclear whether a pipe is being positively recited. There appears to be a method step in an apparatus claim. Again, there is no antecedent basis for "the tubular member."

Claim Rejections - 35 USC § 102

[10] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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[11] Claims 1-3,8,10 are rejected under 35 U.S.C. 102(b) as being anticipated by Flaherty (6,726,677).

[12] With regard to claim 1: Flaherty discloses an endoscope system comprising:

[12a] an endoscope ("20") having an elongated insertion unit whose bending section adjoins a distal section thereof;

[12b] an insertion unit guide member including a plurality of tubular members each of which has a guide channel that has a predetermined diameter permitting another of said plurality of tubular members or the insertion unit to smoothly pass through the guide channel ("working lumen 106," 9/4), and at least one of which has predetermined degrees of flexibility and predetermined lengths and has a direction changing means ("curved deflecting portion 108," 9/9) for changing the advancing direction in which the insertion unit is advanced through the guide channel;

[12c] wherein the insertion unit guide member is passed through or placed in a pipe.

[13] With regard to claim 2: Flaherty further discloses that:

[13a] the direction changing means ("104") is a distal cover member attached to the distal end of the tubular member;

[13b] the distal cover member has a passing direction changing hole ("side opening 110," 9/10) whose opening is formed in the lateral side of the distal cover member; and

[13c] the passing direction changing hole changes the passing direction, in which the insertion unit is passed, from the axial direction of the tubular member to the lateral direction thereof.

[14] With regard to claim 3: Flaherty further discloses that the direction changing means comprises:

[14a] a base member located at the distal end of the tubular member; and an operation wire ("guidewire 81," 8/44) having the distal end thereof fixed to the base member and having the proximal end thereof extended towards a hand-held portion.

[15] With regard to claim 8: Flaherty further discloses that:

[15a] when a plurality of tubular members is joined, the inner and outer diameters of the tubular members are determined so that the diameter of the tubular member located on the distal end side will be smaller than that of the tubular member located on the hand-held portion side (see Figure 3); and

[15b] the lengths of the tubular members are determined so that the length of the tubular member located on the distal end side will be larger than that of the tubular member located on the hand-held portion side (see Figure 3); and

[15c] the degrees of flexibility of the tubular members are determined so that the tubular member located on the distal end side will be softer than the one located on the hand-held portion side (see Figure 3).

[16] With regard to claim 10: Flaherty further discloses:

[16a] a balloon ("balloon 76," 14/33) that changes from a contracted state to a dilated state or vice versa is located at the middle of the tubular member; wherein

[16b] when the balloon is dilated, the dilated balloon comes into close contact with the wall of a pipe, and the tubular member is locked at a predetermined position in the pipe.

Claim Rejections - 35 USC § 103

[17] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

[18] Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flaherty in view of Matsuno (6,605,033).

[19] Flaherty discloses the entirety of claim 2, as noted above, including a distal cover member. Flaherty does not disclose a leading direction adjusting means.

[20] Matsuno discloses a leading direction adjusting means for adjusting the leading direction in which the insertion unit is led out of the passing direction changing hole (see fig 3) comprising:

[20a] a raiser ("direction setting table 5," 4/36-42) located distally to the passing direction changing hole of the distal cover member; and

[20b] an operation wire ("22") having the distal end thereof fixed to the raiser and having the proximal end thereof extended towards a hand-held portion.

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- [21] At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a leading direction adjusting means in the invention of Flaherty in order to vary the direction of the "probe 28."

Additional Claim Rejections - 35 USC § 103

- [22] Claims 6,7,9,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flaherty in view of Matsuno and in further view of Krupa (2003/0216616).

- [23] As noted above, Flaherty or Flaherty in view of Matsuno disclose the entireties of claims 1,3,5. Neither Flaherty nor Matsuno disclose a braid that sheaths the periphery of the tubular member.

- [24] Krupa discloses that bending endoscope typically have braids around them.

Braids are flexible materials which are still strong. Krupa discloses in [0037] that "[e]xamples of materials from which layer 404 can be formed include braid or mesh manufactured from, for example, metals, alloys, low-stretch polymers (e.g. nylon, Kevlar), fiberglass, and composites of these materials. Typically, the braid or mesh wire or thread has a round cross section, but other shaped cross-section can be used (e.g., flat, oval)."

- [25] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that Flaherty's invention comprise a braid around the periphery, as this is well known in the art to be a strong, flexible, and lightweight material.

- [26] Given the plurality of tubes, one of which is inherently capable of facilitating a tool, an operating wire would inherently lie between the braid and at least one tube.

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[27] With regard to claim 11: Flaherty discloses a plurality of juxtaposed tubes (e.g. "106" and "116" in Figure 4B).

Additional Claim Rejections - 35 USC § 103

[28] Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flaherty in view of Hasegawa (2002/0032365).

[29] Flaherty does not disclose a drum.

[30] Hasegawa discloses a drum about which the insertion unit is wound and which has a controller, which controls the bending section, incorporated in the center of the bore thereof, and a support for supporting the drum so that the drum can freely rotate (see Figure 17a).

[31] At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate the drum of Hasegawa into the endoscope of Flaherty. A skilled artisan would be motivated to do so in order to conserve space.

Allowable Subject Matter

[32] Claims 13-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.


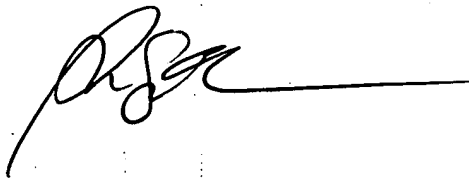
Response to Arguments

[33] Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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- [34] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [35] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [36] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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